

IN THE CLAIMS

1. (Currently Amended) A process for the hydrogenation of alkylaryl ketones, which process comprises contacting a feed comprising the alkylaryl ketones and from at least 1.3% to at most 30% by weight of phenolic compounds with hydrogen in the presence of a heterogeneous hydrogenation catalyst.
2. (Original) The process of claim 1, in which the hydrogenation catalyst comprises copper as metal or metal compound.
3. (Original) The process of claim 1, wherein at least part of the phenolic compounds are added to the feed comprising the alkylaryl ketones.
4. (Currently Amended) The process of claim 1, comprising the steps of:
 - (a) contacting a feed comprising the alkylaryl ketones and from greater than 1% 0.5% to 30% by weight of phenolic compounds with hydrogen in the presence of a heterogeneous hydrogenation catalyst; and,
 - (b) removing at least part of the alkylaryl alcohol formed in step (a) from a stream comprising the phenolic compounds.
5. (Original) The process of claim 1, in which the alkylaryl ketone is acetophenone.
6. (Original) The process of claim 1, in which the feed comprising the alkylaryl ketones is obtainable by a process comprising the steps of:
 - (i) contacting a feed comprising alkylaryl compounds with oxygen to obtain a feed comprising alkylaryl hydroperoxides and alkylaryl ketones;
 - (ii) contacting the feed obtained in step (i) with an alkene in the presence of a catalyst to obtain a reaction mixture comprising alkylene oxide, alkylaryl alcohol and alkylaryl ketones; and,
 - (iii) removing at least part of the alkylene oxide and alkylaryl alcohols from the reaction mixture obtained in step (ii) to obtain the feed comprising alkylaryl ketones.
7. (Currently Amended) The process of claim 6 [[7]], in which the hydrogenation catalyst comprises copper as metal or metal compound.
8. (Original) The process of claim 7, wherein at least part of the phenolic compounds are added to the feed comprising the alkylaryl ketones.
9. (Currently Amended) The process of claim 7, comprising the steps of:

(a) contacting a feed comprising the alkylaryl ketones and from at least 1.3% to at most 30% by weight of phenolic compounds with hydrogen in the presence of a heterogeneous hydrogenation catalyst; and,

(b) removing at least part of the alkylaryl alcohol formed in step (a) from a stream comprising the phenolic compounds.

10. (Original) The process of claim 7, in which the alkylaryl ketone is acetophenone.

11. Cancel.

12. Cancel.

13. Cancel.